

RUSSIAN AGENCY  
FOR PATENTS AND TRADEMARKS

(19) **RU** (11) **2 042 282** (13) **C1**  
(51) Int. Cl.<sup>6</sup> **H 04 N 7/24**

(12) **ABSTRACT OF INVENTION**

(21), (22) Application: 5056701/09, 27.07.1992

(46) Date of publication: 20.08.1995

(71) Applicant:  
Sankt-Peterburgskij gosudarstvennyj  
ehlektrotekhnicheskij universitet  
im.Ul'janova (Lenina V.I.)

(72) Inventor: Ibatullin S.M.,  
Migunov A.V., Titov Ju.M.

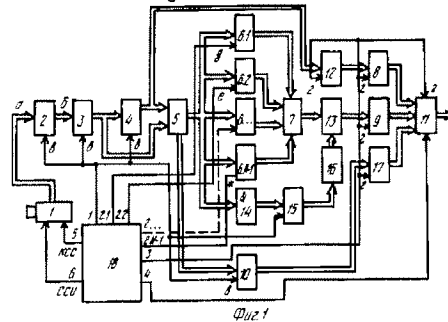
(73) Proprietor:  
Sankt-Peterburgskij gosudarstvennyj  
ehlektrotekhnicheskij universitet  
im.Ul'janova (Lenina V.I.)

(54) **DEVICE OF DIGITAL ENCODING AND DECODING OF TELEVISION SIGNAL**

(57) Abstract:

FIELD: transmission of video information.  
SUBSTANCE: device of digital encoding and decoding of television signal includes in encoding part: television camera 1, analog-to-digital converter 2, two input registers 3, 4, first and second arithmetic logic units 5, 24, m buffer registers (where  $m = 1-(n-1)$ ) 6, adder 7, register 8 of memorization of code of first element of picture elements units, register 9 of memorization of code of average brightness gradient of picture elements units, register 10 of memorization of average brightness of picture elements units, shift register 11 of formation of code digital sequence, buffer register 12 of memorization of code of first element of picture elements units, frequency divider 13, unit 14 for determination of zero difference of codes of amplitudes of adjacent elements, register 15 of memorization of code of zero differences, unit 16 of formation of code of difference of total number of transitions of picture elements units and of number of zero transitions, buffer register 17 of memorization of code of matrix of signs of transition of levels of brightness in picture elements units and first control

unit 18. In detection part it has register 19 of extraction of code digital sequence, register of memorization of code of first element of picture elements units, register of memorization of code of average gradient of brightness of picture elements units, register of memorization of code of matrix of signs of transition of levels of brightness in picture elements units, two commutators, buffer register, digital-to-analog converter, video control unit and control unit. EFFECT: reduced distortions with predetermined coefficient of compression of digital flow of video information. 4 dwg



RU 2 042 282 C1

RU 2 042 282 C1